

## 5. 510(k) Summary

**Manufacturer:** U & I Corporation  
20, Sandan-ro, 76beon-gil(Rd), Uijeongbu-si, Gyeonggi-do,  
Korea, 480-859

**Sponsor:** U & I Corporation  
20, Sandan-ro, 76beon-gil(Rd), Uijeongbu-si, Gyeonggi-do,  
Korea, 480-859

**Sponsor Contact:** Gyeong-Je Kwon, Regulatory Affairs Specialist  
+82 31 852 0102 (ext.610)  
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**Date Prepared:** April 25, 2013

**Device Name:** Trade Name: ASPIRON™ ACP System

**Classification Name:** Spinal Intervertebral Body Fixation Orthosis, per 21 CFR  
888.3060

**Common Name:** Anterior Cervical Plate

**Product Code:** KWQ

**Predicate Devices:** Maxima™ Anterior Cervical Plate System (K061002)  
Blackstone™ III° Anterior Cervical Plating System  
(K012184)  
ZEPHIR™ Anterior Cervical Plate System (K994239)

AUG 29 2013

### Description of Device:

ASPIRON™ ACP System consists of a variety of shapes and size of bone plates, screws and associated instruments. All implant components are made from a titanium alloy (Ti-6Al-4V ELI) in accordance with ASTM F136. ASPIRON™ ACP System is intended to provide stabilization of the cervical vertebra for various indications. Fixation is provided by bone screws inserted into the vertebral body of the cervical spine using an anterior approach.

**Intended Use:**

The ASPIRON™ ACP System is intended for anterior inter-vertebral screw fixation of the cervical spine at levels C2-T1. The system is indicated for temporary stabilization of the anterior spine during the development of cervical spine fusions in patients with the following indications:

- Degenerative disc disease (as defined by neck pain of discogenic origin with degeneration disc confirmed by patient history and radiographic studies);
- Spondylolisthesis
- Trauma (including fractures, dislocation)
- Spinal stenosis
- Tumors
- Deformity (defined as scoliosis, kyphosis, or lordosis)
- Pseudoarthrosis
- Failed previous fusion

**WARNING:** The device is not approved for screw attachment or fixation to the posterior elements (pedicles) of the cervical, thoracic or lumbar spine.

**Substantial Equivalence:**

The ASPIRON™ ACP System is substantially equivalent to Maxima™ Anterior Cervical Plate System (K061002), Blackstone™ III° Anterior Cervical Plating System (K012184) and ZEPHIR™ Anterior Cervical Plate System (K994239) in design, material, mechanical performance, function and intended use.

The mechanical performance of ASPIRON™ ACP System met the acceptance criteria which have been established from the predicate devices.

**1. Comparison Technological Characteristics**

The predicate and proposed devices have the similar intended use and basic fundamental scientific technology and share the following similarities;

- The similar indications for use
- Similar design features
- Incorporate the same or similar materials
- The equivalent mechanical performance

**2. Performance Testing**

**ASPIRON™ ACP System**

**U&I CORPORATION**

The ASPIRON™ ACP System was tested in a non clinical setting (bench testing) to assess that to no new safety and efficiency issues were raised with this device. The testing met all acceptance criteria and verifies that performance of the ASPIRON™ ACP System is substantially equivalent to the predicate devices.

The following tests were performed:

- 1) Construct Test (ASTM F1717)
  - (1) Static compression bending test
  - (2) Static torsion test
  - (3) Compression bending fatigue test
  - (4) Torsion fatigue test
- 2) Component Test
  - (1) Screw back out test

### 3. Conclusion

The data and information provided in this submission support the conclusion that the ASPIRON™ ACP System is substantially equivalent to its predicate devices with respect to indications for use and technological characteristics.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
10903 New Hampshire Avenue  
Document Control Center – WO66-G609  
Silver Spring, MD 20993-0002

August 29, 2013

Gyeong-Je Kwon  
Regulatory Affairs Specialist  
U & I Corporation  
20, Sandan-ro, Uijeongbu-si,  
Gyeonggi-do, Korea 480-859

Re: K131200

Trade/Device Name: ASPIRION™ ACP System  
Regulation Number: 21 CFR 888.3060  
Regulation Name: Spinal intervertebral body fixation orthosis  
Regulatory Class: Class II  
Product Code: KWQ  
Dated: July 1, 2013  
Received: July 3, 2013

Dear Gyeong-Je Kwon:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set

forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to <http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>.

Sincerely yours.

**Erin I. Keith**

For

Mark N. Melkerson  
Director  
Division of Orthopedic Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

## Indications for Use Statement

510(k) Number (if known): \_\_\_\_\_

Device Name: ASPIRON™ ACP System

### Indications for Use:

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Prescription Use   X   AND/OR Over-The-Counter Use \_\_\_\_\_  
(Part 21 CFR 801 Subpart D) (21 CFR 801 Subpart C)

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OF NEEDED)

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Concurrence of Center for Devices and Radiological Health (CDRH)

Anton E. Dmitriev, PhD  
Division of Orthopedic Devices

ASPIRON™ ACP System

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